

Appl. No. 10/034,021
Amdt. dated Nov. 25, 2003
Reply to Office Action of Aug. 29, 2003

REMARKS/ARGUMENTS

Pursuant to 37 C.F.R. § 1.111, reconsideration of the present application in view of the foregoing amendments and the following remarks is respectfully requested.

In the Claims

Claims 1 -2 and 4 - 29 are presented for the Examiner's consideration.

Claim 1 has been amended to incorporate the limitation of claim 3 that the nonwoven structure also comprises superabsorbent. Claim 3 has been cancelled. The dependency of claim 4 has been amended as a result of the cancellation of claim 3. No new matter has been added.

Claim 12 has been corrected to address an objection as to informalities.

Summary of the Invention

This invention relates to a nonwoven structure containing superabsorbent and binder fibers, where the binder fibers have a lower melting point than conventional fibers. These binder fibers may also contain an energy receptive additive that provides rapid heating when subjected to dielectric energy such as radio frequency or microwave radiation. This rapid heating is advantageous for bonding of the nonwoven structure in high-speed industrial application.

Regarding Examiner's Objections and Rejections

1. Objection to informalities in the claim 12

Claim 12 has been amended to correct the Informalities objected to by the Examiner. Specifically, the repeats of compounds mentioned twice within listed compounds for the energy receptive additive have been deleted.

2. Rejection for obviousness by Kerawalla in view of Haile et al.

By way of the Office Action mailed August 29, 2003, Examiner Torres-Velazquez rejected claims 1 -2 and 4 - 11 under 35 U.S.C. § 103(a) as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over Kerawalla (VVO 91/19036)

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in view of Haile et al. (U.S. Patent No. 6,495,656 B2). Note – Applicant is proceeding under the assumption that the Examiner is referring to Haile et al., U.S. Patent No. 6,495,656 B1, as per attorney of record Steve Flack's conversation with the Examiner. This rejection is respectfully traversed to the extent that it may apply to the present claims.

Kerawalla teaches the use of bicomponent binder fibers, including sheath-core bicomponent binder fibers where the sheath of the fiber contains an EMR (electromagnetic radiation) susceptor (see page 8, lines 1-3). While, Kerawalla does not teach the oxidation or dielectric loss properties of the present invention, the Examiner contends that structure of Kerawalla is substantially similar in structure to the present invention and thus presumes that the property is inherent in Kerawalla. *In re Best*, 195 USPQ 430, 433 (CCPA 1977).

Haile et al. teaches copolyesters that may be used to form fibers and bonded products containing the binder fibers which can be softened by applying heat, microwave frequencies, radio frequencies, or by several other methods (see, column 28, lines 27-58). Haile et al. does not specifically teach that the binder fibers are made from polymers having a melting point of at most 110 °C, at most 90 °C, or at most 80 °C, but the Examiner contends that Haile et al. does teach polymeric materials that would meet the claimed melting point temperatures.

Claim 1 of the present invention includes the limitation that the nonwoven structure of the present invention comprises superabsorbent along with binder fibers. Claims 2 and 4-11 are dependent on claim 1 and thus contain all of the limitations of claim 1.

In contrast, neither Kerawalla nor Haile teaches the use of superabsorbents. Additionally, since Kerawalla fails to teach the use of superabsorbents, the structure of Kerawalla cannot be said to be substantially similar to the present invention, thus the claimed oxidation and the dielectric loss properties of the present invention cannot be presumed to be inherent in Kerawalla.

Because Kerawalla and Haile et al. fail to teach all of the claim limitations of claims 1 -2 and 4 – 11, the *prima facie* case for obviousness has not been established. Applicants respectfully submit that claims 1-2 and 4-11 in view of Kerawalla and Haile et al. are not obvious in the sense of 35 U.S.C. §103(a) and the rejection should be withdrawn.

3. Rejection for obviousness by Kerawalla in view of Haile et al. and Gindrup et al.

By way of the Office Action mailed August 29, 2003, Examiner Torres-Velazquez rejected claims 12 – 14 under 35 U.S.C. § 103(a) as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over Kerawalla (WO 91/19036) in

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view of Haile et al. (U.S. Patent No. 6,495,656 B2), further in view of Gindrup et al. (U.S. Patent No. 5,786,785). This rejection is respectfully **traversed** to the extent that it may apply to the present claims.

Claims 12-14 of the present invention are dependent on claim 1 which claims a nonwoven structure comprising superabsorbents and binder fibers. Neither Kerawalla, Haile et al., nor Gindrup et al. teaches the use of superabsorbents with such binder fibers.

Because Kerawalla in view of Haile et al. and further in view of Gindrup et al. fails to teach all of the claim limitations of claims 12-14, the *prima facie* case for obviousness has not been established. Therefore, Applicants respectfully ask that the obviousness rejection of claims 12-14 under 35 U.S.C. § 103(a) be withdrawn.

4. Rejection for obviousness by Kerawalla in view of Haile et al. and Goldman et al.

By way of the Office Action mailed August 29, 2003, Examiner Torres-Velazquez rejected claims 3 - 4 and 15 - 29 under 35 U.S.C. § 103(a) as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over Kerawalla (WO 91/19036) in view of Haile et al. (U.S. Patent No. 6,495,656 B2), and further in view of Goldman et al. (U.S. Patent No. 5,562,646). This rejection is respectfully **traversed** to the extent that it may apply to the present claims.

Kerawalla teaches nonwoven structures with binder fibers containing EMR susceptors along with natural fibers, but it does not teach the use of superabsorbent. Goldman et al. teaches absorbent members useful in containment of body fluids in which at least one region containing hydrogel-forming absorbent polymer (superabsorbent). (See Abstract). Examiner Torres-Velazquez contends that it would be obvious to one of ordinary skill in the art to provide the nonwoven structure of Kerawalla and Haile et al. with superabsorbent materials of Goldman et al.

The present invention teaches that use of microwave energy to heat binder fibers in a nonwoven structure containing superabsorbents requires careful control. The use of microwave energy in the presence of natural fibers and superabsorbents can result in thermal damage and fire without such proper control (see, page 13, lines 8 - 18).

Due to the potential for fire, it would not be obvious to one skilled in the art to combine the nonwoven structure of Kerawalla and Haile et al. with the superabsorbents of Goldman et al. Therefore, Applicants respectfully ask that the obviousness rejection of claims 3-4 and 15 - 29 under 35 U.S.C. § 103(a) be withdrawn.

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5. Provisional rejection under double-patenting over claims of copending application

By way of the Office Action mailed August 29, 2003, Examiner Torres-Velazquez provisionally rejected claims 1 - 4 and 8 - 23 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 - 4 and 8 - 24 of copending Application No. 10/033,860. This rejection is respectfully **traversed** to the extent that it may apply to the present claims.

The present application and U.S. Application No. 10/033,860 are pending. Notwithstanding the provisional obviousness-type double patenting rejection, allowable subject matter has not been indicated in either of these applications. Where a provisional rejection under the judicially created doctrine of obviousness-type double patenting is made between two or more applications, M.P.E.P. §804(I)(B) states that "[i]f the 'provisional' double patenting rejection in one application is the only rejection remaining in that application, the examiner should then withdraw that rejection and permit the application to issue as a patent, thereby converting the 'provisional' double patenting rejection in the other application(s) into a double patenting rejection at the time the one application issues as a patent." It is not evident which of the pending applications will become allowable first. Therefore, any action by Applicants with regard to this provisional rejection is premature.

In response to the Examiner's assertion that claims 1 - 4 and 8 - 23 are directed to an invention not patentably distinct from claims 1 - 4 and 8 - 24 of commonly assigned copending U.S. Application Nos. 10/034,021, Applicants hereby state that U.S. Application Nos. 10/034,021 and 10/033,860 were, at the time the invention of Application No. 10/034,021 was made, subject to an obligation of assignment to Kimberly-Clark Worldwide, Inc.

6. Provisional rejection under double-patenting over claims of copending application in view of Haile et al.

By way of the Office Action mailed August 29, 2003, Examiner Torres-Velazquez provisionally rejected claims 1 - 4 and 8 - 23 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 - 4 and 8 - 24 of copending Application No. 10/033,860 in view of Haile et al. (U.S. Patent No. 6,562,938). This rejection is respectfully **traversed** to the extent that it may apply to the present claims.

The present application and U.S. Application No. 10/033,860 are pending. Notwithstanding the provisional obviousness-type double patenting rejection, allowable subject matter has not been indicated in either of these applications. Where a provisional rejection under the judicially created

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doctrine of obviousness-type double patenting is made between two or more applications, M.P.E.P. §804(I)(B) states that "[i]f the 'provisional' double patenting rejection in one application is the only rejection remaining in that application, the examiner should then withdraw that rejection and permit the application to issue as a patent, thereby converting the 'provisional' double patenting rejection in the other application(s) into a double patenting rejection at the time the one application issues as a patent." It is not evident which of the pending applications will become allowable first. Therefore, any action by Applicants with regard to this provisional rejection is premature.

In response to the Examiner's assertion that claims 1 - 4 and 8 - 23 are directed to an invention not patentably distinct from claims 1 - 4 and 8 - 24 of commonly assigned copending U.S. Application Nos. 10/034,021, Applicants hereby state that U.S. Application Nos. 10/034,021 and 10/033,860 were, at the time the invention of Application No. 10/034,021 was made, subject to an obligation of assignment to Kimberly-Clark Worldwide, Inc.

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For the reasons stated above, it is respectfully submitted that all of the presently presented claims are in form for allowance.

Please charge any prosecutorial fees which are due to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875.

The undersigned may be reached at: (770) 587-8096.

Respectfully submitted,

WORKMAN ET AL.

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CERTIFICATE OF FACSIMILE TRANSMISSION

I, Nathan Hendon, hereby certify that on November 25, 2003, this document is being sent by facsimile to the United States Patent and Trademark Office, Technology Center 1700, "Before Final" facsimile machine at 703-872-9310.

By: 

Nathan Hendon